

Illinois Department of Transportation  
Bureau of Materials and Physical Research  
**APPROVED/QUALIFIED PRODUCT LIST OF SYNTHETIC FIBERS**  
**January 16, 2015**

**This list supersedes the July 21, 2014 list.**

Special Provision for Portland Cement Concrete Inlay or Overlay (BDE)  
(Effective: January 1, 2015, Revised: April 1, 2015)

Supplemental Specification for Section 606. Concrete Gutter, Curb, Median, and Paved Ditch (Adopted: January 1, 2015)

**Material Code 43515**

For information regarding new product submittal, click the "New Submittal" bookmark to the left.

The materials listed on page 1 of this approved/qualified product list are for use only with the:  
**Special Provision for Portland Cement Concrete Inlay or Overlay (BDE).**

ABC Polymer Industries  
300 M.H. Williams Drive  
Helena, AL 35080  
Phone: 205-620-9882  
Attn: Mr. R.C. Zellers  
Producer/Supplier No. 6638-01  
[www.abcpolymerindustries.com](http://www.abcpolymerindustries.com)  
**"TUF-MAX DOT"**  
Dosage Rate: 4.5 lb / yd<sup>3</sup>

BASF Corporation  
23700 Chagrin Boulevard  
Cleveland, OH 44122  
Phone: 216-839-7500  
Attn: Mr. Mark Piechuta  
Producer/Supplier No. 4179-04  
[www.masterbuilders.com](http://www.masterbuilders.com)  
**"MASTERFIBER MAC MATRIX"**  
Dosage Rate: 4 lb / yd<sup>3</sup>

The Euclid Chemical Company  
19218 Redwood Road  
Cleveland, OH 44110-2799  
Phone: 800-321-7628  
Attn: Mr. Brian Lewis  
Producer/Supplier No. 614-01  
[www.euclidchemical.com](http://www.euclidchemical.com)  
**"TUF-STRAND SF"**  
Dosage Rate: 5 lb / yd<sup>3</sup>

General Resource Technology  
2978 Center Court  
Eagan, MN 55121-1257  
Phone: 800-324-8154  
Attn: Ms. Jennifer Woolley  
Producer/Supplier No. 5204-01  
[www.grtinc.com](http://www.grtinc.com)  
**"ADVANTAGE STRUCTURAL FIBER"**  
Dosage Rate: 4 lb / yd<sup>3</sup>

W.R. Grace & Company  
62 Whittemore Drive  
Cambridge, MA 02140-1692  
Phone: 617-498-4555  
Attn: Ms. Denise White  
Producer/Supplier No. 767-01  
[www.graceconstruction.com](http://www.graceconstruction.com)  
**"STRUX 90/40"**  
Dosage Rate: 4 lb / yd<sup>3</sup>

Propex  
1110 Market Street, Suite 300  
Chattanooga, TN 37402  
Phone: 423-553-2462  
Attn: Mr. Drew Loizeaux  
Producer/Supplier No. 6312-02  
[www.propexglobal.com](http://www.propexglobal.com)  
**"FIBERMESH 650"**  
Dosage Rate: 5 lb/yd<sup>3</sup>

Illinois Department of Transportation  
Bureau of Materials and Physical Research  
**APPROVED/QUALIFIED PRODUCT LIST OF SYNTHETIC FIBERS**  
**January 16, 2015**

**This list supersedes the July 21, 2014 list.**

Special Provision for Portland Cement Concrete Inlay or Overlay (BDE)  
(Effective: January 1, 2015, Revised: April 1, 2015)

Supplemental Specification for Section 606. Concrete Gutter, Curb, Median, and Paved Ditch (Adopted: January 1, 2015)

**Material Code 43523**

For information regarding new product submittal, click the "New Submittal" bookmark to the left.

The materials listed on page 2 of this approved/qualified product list are for use only with the:  
**Supplemental Specification for Section 606. Concrete Gutter, Curb, Median, and Paved Ditch**  
**(Adopted: January 1, 2015)**

ABC Polymer Industries  
300 M.H. Williams Drive  
Helena, AL 35080  
Phone: 205-620-9889  
Attn: Mr. R.C. Zellers  
Producer/Supplier No. 6638-01  
[www.abcpolymerindustries.com](http://www.abcpolymerindustries.com)  
**"MONO-TUF"**

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BASF Corporation  
23700 Chagrin Boulevard  
Cleveland, OH 44122  
Phone: 216-839-7500  
Attn: Mr. Mark Piechuta  
Producer/Supplier No. 4179-04  
[www.basf-admixtures.com](http://www.basf-admixtures.com)  
**"MASTERFIBER M35"**  
**"MASTERFIBER M70"**  
**"MASTERFIBER M100"**  
**"MASTERFIBER F70"** (0.75 inch length only)  
**"MASTERFIBER F100"** (0.75 inch length only)

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ICF Concrete Additives  
(as manufactured by William Barnet and Son,  
Producer No. 6909-01)  
2125 Center Avenue  
Fort Lee, NJ 07024  
Phone: 770-314-5212  
Attn: Mr. Michael Cook  
[www.icfmercantile.com](http://www.icfmercantile.com)  
**"ICF-AC 50"** (12 mm( 1/2") and 19mm (3/4") length only)

ICF Concrete Additives  
(as manufactured by RadiciFibras, Producer No. 6897-01)  
2125 Center Avenue  
Fort Lee, NJ 07024  
Phone: 770-314-5212  
Attn: Mr. Michael Cook  
[www.icfmercantile.com](http://www.icfmercantile.com)  
**"ICF-AC 60"** (12 mm( 1/2") and 19mm (3/4") length only)

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The Fiber Depot  
335 Eakin Road  
Harrisville, PA 16038  
Phone: 800-438-9006  
Attn: Ms. Cori Fitzpatrick  
Supplier No. 6824-01  
[www.thefiberdepot.com](http://www.thefiberdepot.com)  
**"MULTIFILAMENT POLYPROPYLENE"**

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W.R. Grace & Company  
62 Whittemore Drive  
Cambridge, MA 02140-1692  
Phone: 617-498-4555  
Attn: Ms. Denise White  
Producer/Supplier No. 767-01  
[www.graceconstruction.com](http://www.graceconstruction.com)  
**"GRACE MICROFIBER"**  
**"GRACE FIBERS"**  
**"GILCO FIBERS"**

**Synthetic Fibers for use in Portland Cement Concrete Inlay or Overlay  
Submittal for Review and Approval**

Effective: July 27, 2007  
Revised: October 19, 2012

**A. Scope**

The following guidelines are provided to clarify the submittal requirements and expedite the review process for approving synthetic fibers according to the Department's Special Provision for Portland Cement Concrete Inlay or Overlay (BDE)<sup>1</sup>.

**B. Procedure**

When submitting synthetic fibers to the Department:

First Phase of Submittal Process:

- The manufacturer shall select an Independent Laboratory accredited by the AASHTO Materials Reference Laboratory (AMRL) for Portland Cement Concrete (required methods in ASTM C 1077). The lab shall be equipped to perform the Illinois Modified ASTM C 1609<sup>2</sup> test method on a submitted synthetic fiber product.
- Prior to the Independent Laboratory testing, the laboratory name, material sources, and mix design shall be submitted to the Department for approval.

Second Phase of Submittal Process:

The Manufacturer shall provide the following to the Department:

- The specific product brand name,
- Independent laboratory test results which show the product meets Department specifications,
  - Residual strength ratio
- Material Safety Data Sheet,
- Technical Data Sheet,
- Contact person's name, title, address, email address, and phone number,
- A letter stating the subject material will not be changed without prior written notification to IDOT,
- A letter stating the material complies with the following requirements from the Special Provision for Portland Cement Concrete Inlay or Overlay (BDE)<sup>1</sup>:

Synthetic fibers shall be Type III according to ASTM C 1116. The synthetic fiber shall be a monofilament or bundled monofilament with a minimum length of 1.0 in. (25 mm) and a maximum length of 2 1/2 in. (63 mm), and shall have a maximum aspect ratio (length divided by the equivalent diameter of the fiber) of 150. The quantity of synthetic fiber(s) added to the concrete mixture shall be sufficient to have a residual strength ratio (R150,3) of 20.0 percent according to Illinois Modified ASTM C 1609. The maximum dosage rate shall not exceed 5.0 lb/cu yd (3.0 kg/cu m), unless the manufacturer can demonstrate through a field demonstration that the concrete mixture will be workable and fiber clumping is not a problem as determined by the Engineer.

- [Acknowledgement by Company.](#)

The submittal information shall be sent to:

Melinda Winkelman  
Illinois Department of Transportation  
Bureau of Materials & Physical Research  
126 East Ash Street  
Springfield, IL 62704-4766

Any submittal provided without the above listed information will not be reviewed for approval. Any changes in the formulation outside the manufacturer's original parameters will necessitate a new submittal.

<sup>1</sup> <http://www.dot.il.gov/desenv/pdf/80299.pdf>

<sup>2</sup> <http://www.dot.il.gov/materials/labtestproc.html>

The manufacturer will be notified when the review is complete. For questions regarding the testing and approval process, contact Melinda Winkelman at 217-782-0117.

**C. Recertification**

Annual recertification of all synthetic fibers is required. During the last quarter of the calendar year, a recertification letter will be sent to the manufacturer. The recertification paperwork is due January the following year. For example, the recertification letter is mailed November 2012 and due by mid January 2013.

<sup>1</sup> <http://www.dot.il.gov/desenv/pdf/80299.pdf>

<sup>2</sup> <http://www.dot.il.gov/materials/labtestproc.html>

Illinois Department of Transportation  
Bureau of Materials and Physical Research

**Synthetic Fibers for use in Portland Cement Concrete Inlay or Overlay  
Submittal for Review and Approval**

Effective: July 27, 2007

Revised: July 13, 2013

**Instructions for Acknowledgement by Company:**

The owner, partner, or corporate officer shall complete the following and return a signed and dated copy with the product submittal or recertification.

\_\_\_\_\_ desires to obtain advance approval of materials to be  
(Insert name of company)  
supplied to Department of Transportation contractors as more fully described herein. I  
and \_\_\_\_\_ understand that the Department of Transportation  
(Insert name of company)  
reserves the right in its contracts to approve materials at the source of supply as  
provided in Article 106.01 of the Standard Specifications for Road and Bridge  
Construction. I and \_\_\_\_\_ further understand that approval of  
(Insert name of company)  
company supplied material pursuant to this request does not constitute a contract to  
supply material to the State of Illinois or any of its contractors, and that the Department  
of Transportation does not assure or guarantee that any materials approved hereunder  
will be supplied to the State or any of its contractors. In consideration of approval, I and  
\_\_\_\_\_ agree to the terms, conditions and performance  
(Insert name of company)  
standards of the Standard Specifications for Road and Bridge Construction.

Type of Company:      Individual ☐      Partnership ☐      Corporation ☐

Company Name \_\_\_\_\_

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

Business Address \_\_\_\_\_

City/State/Zip Code \_\_\_\_\_

Date of Signature \_\_\_\_\_

Illinois Department of Transportation  
Bureau of Materials and Physical Research

**Synthetic Fibers for use in Concrete Gutter, Curb, Median, and Paved Ditch  
Submittal for Review and Approval**

Effective: September 7, 2012

[Revised: September 28, 2012](#)

**A. Scope**

The following guidelines are provided to clarify the submittal requirements and expedite the review process for approving synthetic fibers according to the Department's Special Provision for Synthetic Fibers in Concrete Gutter, Curb, Median, and Paved Ditch (BDE).

**B. Procedure**

When submitting synthetic fibers to the Department:

The Manufacturer shall provide the following to the Department:

- The specific product brand name,
- Material Safety Data Sheet,
- Technical Data Sheet,
- [Acknowledgement by Company](#),
- Contact person's name, title, address, email address, and phone number,
- A letter stating the subject material will not be changed without prior written notification to IDOT, and
- A letter stating the material complies with the following requirements from the Special Provision for Synthetic Fibers in Concrete Gutter, Curb, Median, and Paved Ditch (BDE):

Synthetic fibers shall be Type III according to ASTM C 1116. The synthetic fiber shall have a minimum length of 1/2 in. (13 mm) and a maximum length of 0.75 in. (19 mm).

The submittal information shall be sent to:

Melinda Winkelman  
Illinois Department of Transportation  
Bureau of Materials & Physical Research  
126 East Ash Street  
Springfield, IL 62704-4766

Any submittal provided without the above listed information will not be reviewed for approval. Any changes in the formulation outside the manufacturer's original parameters will necessitate a new submittal.

The manufacturer will be notified when the review is complete. For questions regarding the testing and approval process, contact Melinda Winkelman at 217-782-0117.

**C. Recertification**

Annual recertification of all synthetic fibers is required. During the last quarter of the calendar year, a recertification letter will be sent to the manufacturer. The recertification paperwork is due January the following year. For example, the recertification letter is mailed November 2012 and due by mid January 2013.

Illinois Department of Transportation  
Bureau of Materials and Physical Research

**Synthetic Fibers for use in Concrete Gutter, Curb, Median, and Paved Ditch  
Submittal for Review and Approval**

Effective: September 7, 2012

**Instructions for Acknowledgement by Company:**

The owner, partner, or corporate officer shall complete the following and return a signed and dated copy with the product submittal or recertification.

\_\_\_\_\_ desires to obtain advance approval of materials to be  
(Insert name of company)  
supplied to Department of Transportation contractors as more fully described herein. I  
and \_\_\_\_\_ understand that the Department of Transportation  
(Insert name of company)  
reserves the right in its contracts to approve materials at the source of supply as  
provided in Article 106.01 of the Standard Specifications for Road and Bridge  
Construction. I and \_\_\_\_\_ further understand that approval of  
(Insert name of company)  
company supplied material pursuant to this request does not constitute a contract to  
supply material to the State of Illinois or any of its contractors, and that the Department  
of Transportation does not assure or guarantee that any materials approved hereunder  
will be supplied to the State or any of its contractors. In consideration of approval, I and  
\_\_\_\_\_ agree to the terms, conditions and performance  
(Insert name of company)  
standards of the Standard Specifications for Road and Bridge Construction.

Type of Company:      Individual ☐      Partnership ☐      Corporation ☐

Company Name \_\_\_\_\_

Printed Name \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

Business Address \_\_\_\_\_

City/State/Zip Code \_\_\_\_\_

Date of Signature \_\_\_\_\_